# CORE-10

## CLEAR GLOSS TPU PAINT PROTECTION FILM

**PRODUCT CODE C10-75 / NOMINAL 7.5 MIL / CLEAR GLOSS FINISH**

Core-10 is a premium transparent gloss TPU paint protection film engineered for enhanced mechanical strength, durable adhesion, high optical clarity and heat-assisted surface recovery. It is intended for professional installation on compatible glossy automotive paintwork.

| 7.5 MIL | 126 GU | 90% | 10 YEARS |
|---|---|---|---|
| NOMINAL THICKNESS | GLOSS @ 60 DEG | LIGHT TRANSMITTANCE | LIMITED WARRANTY* |

## PRODUCT CONSTRUCTION

| 01 | 02 | 03 | 04 | 05 |
|---|---|---|---|---|
| **TOP PROTECTIVE PET**<br>46 µm removable carrier | **HYDROPHOBIC TOP COAT**<br>Integrated coating / 16 µm | **BASF TPU CORE**<br>Flexible transparent base film | **ADHESIVE**<br>Ashland AROSET™ 951059 / 28 µm | **RELEASE PET**<br>75 µm removable liner |

## PRODUCT SPECIFICATIONS

| PARAMETER | SPECIFICATION |
|---|---|
| **Product type** | Clear gloss TPU paint protection film |
| **Nominal thickness** | 7.5 mil (finished film tested at 190 µm) |
| **Base material** | BASF TPU |
| **Top coat** | Integrated hydrophobic coating |
| **Top-coat thickness** | 16 µm |
| **Adhesive** | Ashland AROSET™ 951059 pressure-sensitive adhesive |
| **Adhesive layer** | 28 µm |
| **Colour / appearance** | Colourless, transparent, flat and uniform |
| **Suitable paintwork** | Glossy automotive paintwork preferred |
| **Roll dimensions** | 1.52 m x 15 m |
| **Sentrix limited warranty** | 10 years* |

## OPTICAL AND SURFACE PERFORMANCE

| PROPERTY | TEST METHOD | REQUIREMENT | RESULT |
|---|---|---|---|
| **Surface gloss** | Gloss meter @ 60° | >=95 GU | 126 GU |
| **Light transmittance** | Float-glass method | >=90% | 90% |
| **TPU haze** | Haze meter | <=3% | 0.98% |
| **UV blocking** | LS182 tester | >90% | 98% |
| **Hydrophobicity** | Marker-pen line test | Hydrophobic | Confirmed |
| **Stain resistance** | Marker residue after alcohol wipe | Score 0-10 | 10 / 10 |

# PERFORMANCE TEST RESULTS

## MECHANICAL, DURABILITY AND QUALITY CONTROL

**Production COA reference: SN 7.5mil / test date 30 June 2026**

### MECHANICAL PERFORMANCE

| PROPERTY | TEST METHOD | REQUIREMENT | RESULT |
|---|---|---|---|
| **Elongation at break** | PT-6081G | >=150% | 399% |
| **Tensile strength** | PT-6081G | >15 MPa | 19.7 MPa |
| **100% modulus** | PT-6081G | >6 MPa | 6.8 MPa |
| **Tearing strength** | GB/T 529 | >=40 kN/m | 95.3 kN/m |
| **Adhesive peel - 20 min** | GB/T 2792-2014 | >1,400 gf | 1,489 gf |

### DURABILITY PERFORMANCE

| PROPERTY | TEST CONDITION | REQUIREMENT | RESULT |
|---|---|---|---|
| **QUV ageing resistance** | ASTM G154-16, Cycle 1, 1,000 h | ΔE*ab <2 | 0.15 |
| **Heat self-healing** | Scratch recovery using 70°C hot water or hot air | 100% self-healing | 100% |
| **Scratch resistance** | 1,000 copper-brush cycles at 500 g | No damage after thermal repair | No damage |
| **Temperature resistance** | 80 ±2°C for 24 h; recover 2 h; then -20 ±2°C for 24 h | No cracks, turbidity, bubbles or discoloration | No abnormality |

### APPEARANCE QUALITY CONTROL

| PROPERTY | METHOD | ACCEPTANCE CRITERIA | RESULT |
|---|---|---|---|
| **Visual colour** | Visual inspection | Colourless and transparent | Qualified |
| **Product appearance** | Visual inspection | No impurities, coating lines, bubbles, tension marks or water ripples | Qualified |
| **Crystal / impurity points** | Visual inspection | 0.6-1.0 mm: <=6 pcs/m2; >1.0 mm: 0 | Qualified |

Application: Professional automotive installation only. Confirm substrate condition and paint compatibility before application. Use approved installation solution, tools and edge-finishing practices.
Thickness: The tested finished-film thickness of 190 µm is the sum of TPU, coating and adhesive layers. Removable PET carriers are excluded.
Data basis: Values are based on the cited production certificate and may vary within normal manufacturing tolerances. This sheet is not a substitute for installation or warranty terms.
*Warranty: Ten-year Sentrix limited warranty, subject to registration, approved installation, care requirements, exclusions and the prevailing Sentrix warranty policy.